



Lee et al. SN 09/703,237 April 2005

UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office

In re Application of:)
Lee et al.) Group Art Unit 2644
Serial No. 09/703,237)
Filed: October 31, 2000)
Docket No.: P-31221)
For: AUDIO SIGNAL PHASE DETECTION)
SYSTEM AND METHOD)

Declaration of Barry T. Lee

I, Barry T. Lee, declare under penalty of perjury as follows:

1. I am one of the named inventors of the above-identified patent application Serial No. 09/703,237. I have more than 40 years of experience working as an electrical engineer.

2. I have read U.S. patent 6,681,019 B1 to Kitano. The white noise signal generated by the white noise generator 12 and low-pass filter 14 of the Kitano system does not have "a first frequency component having a selected polarity that is marked by a second frequency component that is distinguishable from the first frequency component".

3. Kitano teaches that a human sitting between two speakers can determine whether or not the two speakers are in phase with one another. This is because the sound heard by the human should be louder when the two speakers are in phase than when the two speakers are out of phase. Kitano does not teach that a human can

detect a selected polarity of a first frequency component or that a human can detect which polarity of a first frequency component is marked by a second frequency component. Detecting whether or not two speakers are in phase with each other is completely different from detecting different polarities of a first frequency component and detecting which polarity of a first frequency component is marked by a second frequency component.

4. I cannot, by listening to an audio signal, detect a selected polarity of a first frequency component of an audio signal or detect which polarity of a first frequency component is marked by a second frequency component. I have never known or heard of any human that can, by listening to an audio signal, detect a selected polarity of a first frequency component or detect which polarity of a first frequency component is marked by a second frequency component. Similarly, I have never known or heard of any human that can determine the polarity of a lower frequency component of an audio test signal at the occurrence of a higher frequency component of the audio test signal.

I am aware that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon. All statements made of the declarant's own knowledge are true and all statements made on information and belief are believed to be true

Executed at La Palma, California.

Dated: May 23, 2005

Barry T. Lee
Barry T. Lee